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| 09/821,649      | 03/29/2001  | Hongjiang Song       | INTL-0550-US (P11109) | 5728             |

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EXAMINER

WARE, CICELY Q

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,649

Applicant(s)

SONG, HONGJIANG

Examiner

Cicely Ware

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14 and 16-23 is/are rejected.
- 7) ☒ Claim(s) 7 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-14, 16, 17-21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Silvestri (US Patent Application 2002/0130691 A1).

(1) With regard to claim 1, Silvestri discloses in (Fig. 1 (26), Fig. 2) a system comprising: a locked loop circuit (Fig. 1 (26)); and a processor (Fig. 1 (12)) coupled to the locked loop circuit (Fig. 1 (26)) to control the locked loop circuit and perform at least one other function in the system not related to the control of the locked loop circuit (Fig. 1 (18, 16), pg. 2, col. 1, lines 34-41, 65-67, col. 2, lines 1-3).

(2) With regard to claim 2, claim 2 inherits all the limitations of claim 1. Silvestri further discloses in (Fig. 2) wherein the locked loop circuit comprises a delay locked loop circuit (54).

(3) With regard to claim 3, claim 3 inherits all the limitations of claim 1. Silvestri further discloses in (Fig. 1, Fig. 2) wherein the locked loop circuit (Fig. 1 (26)) comprises: an interface accessible by the processor (Fig. 2 (12, 34, 54)).

(4) With regard to claim 4, claim 4 inherits all the limitations of claim 3. Silvestri further discloses (Fig. 2 (54)) wherein the interface indicates a phase difference between an input clock signal and an output clock signal generated by the locked loop circuit (Fig. 3, pg. 3, col. 2, lines 22-49).

(5) With regard to claim 5, claim 5 inherits all the limitations of claim 3. Silvestri further discloses in (Fig. 1) wherein the system comprises a computer system (26) having a system memory (Fig. 2 (38)) and the interface (Fig. 2 (12)) is addressable (Fig.

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2 (34)) in a range of addresses used to access the system memory (Pg. 2, col. 2, lines 5-24, pg. 3, col. 1, lines 6-41).

(6) With regard to claim 6, claim 6 inherits all the limitations of claim 3. Silvestri further discloses in (Fig. 2 (54, 12), Fig. 3 (62)) wherein the interface indicates storage accessible by the processor to store an indication of a delay used by the locked loop circuit (Pg. 3, col. 2, lines 51-67).

(7) With regard to claim 8, claim 8 inherits all the limitations of claim 1. Silvestri further discloses in (Fig. 1 (12), Fig. 2 (12)) wherein the processor comprises a microprocessor (Pg. 2, col. 1, lines 34-41).

(8) With regard to claim 9, claim 9 inherits all the limitations of claim 1. Silvestri further discloses a system memory storing a program, wherein the processor executes the program to perform said other function (Pg. 2, col. 2, lines 5-24).

(9) With regard to claim 10, Silvestri further discloses in (Fig. 3) a delay line (58) to receive an input clock signal and furnish an output clock signal; a phase detector (64) to indicate a phase difference between the input clock signal and the output clock signal; and an interface accessible by a processor (Fig. 1 (26)) to control the locked loop circuit to adjust a timing between the input clock signal and the output clock signal (Pg. 2, col. 2, lines 26-57).

(10) With regard to claim 11, claim 11 inherits all the limitations of claims 10 and 2 above.

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(11) With regard to claim 12, claim 12 inherits all the limitations of claim 10. Silvestri further discloses wherein the interface indicates a phase difference between an incoming clock signal to the locked loop circuit and another signal generated by the locked loop circuit (Pg. 3, col. 2, lines 22-49).

(12) With regard to claim 13, claim 13 inherits all the limitations of claims 10 and 5 above.

(13) With regard to claim 14, claim 14 inherits all the limitations of claim 10. Silvestri further discloses wherein the interface includes storage accessible by the processor to store an indication of a delay applied by the locked loop circuit to the input clock signal (Fig. 2 (54, 12), Fig. 3 (56, 58)).

(14) With regard to claim 16, claim 16 inherits all the limitations of claim 1.

(15) With regard to claim 17, claim 17 inherits all the limitations of claims 16 and 2 above.

(16) With regard to claim 18, claim 18 inherits all the limitations of claim 16. Silvestri further discloses in (Fig. 2 (30)) performing at least one of read and write operations to the interface to control the locked loop circuit (Pg. 3, col. 1, lines 51-61, col. 2, lines 10-20).

(17) With regard to claim 19, claim 19 inherits all the limitations of claims 16 and 4 above.

(18) With regard to claim 20, claim 20 inherits all the limitations of claims 16 and 5 above.

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(19) With regard to claim 21, claim 21 inherits all the limitations of claims 16 and 6 above.

(20) With regard to claim 23, claim 23 inherits all the limitations of claims 16 and 8 above.

***Allowable Subject Matter***

5. Claims 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made record of and not relied upon is considered pertinent to applicant's disclosure:

a. Mizumo US Patent 5,670,903 discloses a clock signal distribution circuit having a small clock skew.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 703-305-8326. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Cicely Ware*

cqw  
June 17, 2004



**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
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